

UNITED STATES CLIMATE ALLIANCE

DRAFT Resilient Communities, Infrastructure and Natural Resources Factsheet

An Initiative of the U.S. Climate Alliance

The True Cost of Climate Change

In 2017 alone, severe climate-related events cost the United States roughly [[HYPERLINK "https://www.climate.gov/news-features/blogs/beyond-data/2017-us-billion-dollar-weather-and-climate-disasters-historic-year"](https://www.climate.gov/news-features/blogs/beyond-data/2017-us-billion-dollar-weather-and-climate-disasters-historic-year)] billion in damages, shattering the previous U.S. annual record cost of \$214.8 billion in 2005 – the year of Hurricane Katrina. According to White House estimates, Hurricanes Harvey and Irma reduced September 2017 employment growth by roughly 140,000 jobs, and reduced 3rd quarter GDP growth by [[HYPERLINK "https://www.whitehouse.gov/articles/effects-hurricanes-harvey-irma-employment-industrial-production-real-gdp-growth-q3"](https://www.whitehouse.gov/articles/effects-hurricanes-harvey-irma-employment-industrial-production-real-gdp-growth-q3)] percent.

Worryingly, this is part of a growing trend. The severity and frequency of extreme events is on the rise: of the top [[HYPERLINK "https://www.nhc.noaa.gov/news/UpdatedCostliest.pdf"](https://www.nhc.noaa.gov/news/UpdatedCostliest.pdf)] to land on U.S. soil, all but three occurred since 2000. Coupled with wealth and population growth, movement towards our nation's coasts and other high-risk areas, such as the wildland urban interface, and increases in property value, the human and economic toll will continue to grow without coordinated action to both reduce our emissions and prepare for unavoidable climate impacts.

States are now taking steps to better understand the physical and economic impacts of severe weather and climate change on their communities to help plan and respond to a changing climate, and ensure they are investing in mitigation and adaptation actions that deliver benefits that far exceed the costs of inaction. States are also partnering with local and community leaders to expand access to tools and resources they can utilize to build resilience to climate impacts.

State Leadership to Date

Coordinated action through the Climate Alliance builds on years of leadership by member states in helping to protect their communities, economy and infrastructure from climate impacts. Some examples include:

- The Connecticut Institute for Resilience and Climate Adaptation (CIRCA) is a joint partnership by the state and UConn to increase the resilience and sustainability of vulnerable communities along Connecticut's coast and inland waterways by addressing critical infrastructure, coastal flooding, sea level rise, and living shorelines.
- Hawai'i produced the Sea Level Rise Vulnerability & Adaptation Report - a tool to estimate the scale and cost of potential flooding and erosion with sea level rise, and to recommend measures to reduce exposure to sea level rise and increase the state's capacity to adapt.
- Maryland's CoastSmart Communities Program assists coastal communities to address short- and long-term coastal hazards, such as coastal flooding, storm surge, and sea level rise by connecting local planners to essential resources, information, tools and trainings.

- North Carolina is addressing sea level rise in part through the state's Coastal Resource Commission Science Panel, which develops a 5-Year Sea Level Rise Synthesis and Assessment Report to monitor changing conditions, evaluate state-specific data, and guide coastal policy development by the NC Coastal Resources Commission.

U.S. Climate Alliance Collaboration

The Alliance is working to build greater resiliency of its communities by fundamentally changing the way we design, procure and manage our infrastructure assets, and by giving Governors access to critical tools and resources to help their states and communities prepare for climate impacts. Cooperation will be focused on four strategic opportunities:

- **The Economics of Resilience:** A key first step will involve defining the challenge – as Alliance States are expected to invest trillions in infrastructure between now and 2050, Colorado is undertaking a model analysis of the state's economic and physical risks in 2050 compared to 2018 with regard to vulnerability to floods, wildfire, and drought, quantified on a county-by-county basis. The results of the analysis will be shared with Alliance States, and the initiative will explore how to cost-effectively replicate the analysis for interested states.
- **Community preparedness training, funding and implementation:** Massachusetts is leading the way with their new Municipal Vulnerability Preparedness program that helps local communities identify climate vulnerabilities and community strengths, develop and prioritize resilience actions and then implement these priorities with bond funding. Massachusetts will work directly with interested states and partners to embed this model in a proposed playbook, including through a strategic partnership with The Nature Conservancy who has supported this program in Massachusetts.

Based on priorities of individual Alliance member states, the Alliance will work with TNC to identify strategies to address risks posed by extreme weather events and sea level rise. TNC will share its experience and best practices in community engagement, deployment of resilience strategies and tool development to help build technical capacity and promote safer, more resilient futures for communities across the Alliance States. Additionally, TNC will bring its many years of public policy experience in this space to help states and local jurisdictions plan for climate change impacts and implement effective solutions.

- **Life-cycle procurement:** By integrating policy, financial, regulatory and data-driven innovation, and developing cross-sectoral partnerships to engage communities, governments and the private sector in scaling solutions, we can deliver both low-carbon and high-performance infrastructure outcomes in the 21st century. Governor Jerry Brown's 2015 Life Cycle Infrastructure Executive Order (B-30-15) is one of several examples for states to build resilience through better project planning and design, capital facilities and procurement reform and life-cycle asset management. California will work directly with interested states and partners, such as the National Council on Science and the Environment, to develop a playbook for policymakers. The Alliance will also explore new funding mechanisms that recognize the value

of natural infrastructure and the importance of life cycle risk management for public assets meant to last 30-50 years and creating new local incentives to help communities tap into state and federal expertise.

- **Critical data:** The Alliance intends to work in concert with the Independent Advisory Committee (IAC) for the National Climate Assessment – reconvened by Governor Cuomo after its disbandment by the federal government - to improve the collection and communication of actionable data to drive climate resilience. Other cooperative efforts will include landscape level outcomes and protect natural and working lands to secure water, food and the ecosystems that support them.

The [<https://www.usclimatealliance.org/>] is a bipartisan coalition of governors committed to reducing greenhouse gas emissions consistent with the goals of the Paris Agreement.